

What is claimed is:

1. A method for producing a dental prosthesis for a patient, comprising the steps of:
measuring a tooth of the patient, the measuring step comprising moving a probe towards and away from the tooth, wherein the probe provides light to the surface of the tooth, and receives light reflected from the tooth through a plurality of receiving fiber optics, wherein the tooth is measured when the light received from the plurality of receiving fiber optics peak substantially simultaneously, wherein the measuring produces data indicative of the characteristics of the tooth;
generating data for the dental prosthesis based on the measured data; and
preparing the dental prosthesis.
2. The method of claim 1, wherein the step of generating data for the dental prosthesis comprises generating data determinative of a match between the measured data and a shade guide value.